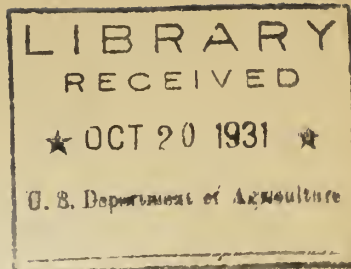


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UNITED STATES DEPARTMENT OF AGRICULTURE
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TROPICAL AND ORIENTAL VEGETABLES, FRUITS, AND NUTS
PROXIMATE COMPOSITION

SELECTED LIST OF REFERENCES

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September, 1931

TROPICAL AND ORIENTAL VEGETABLES, FRUITS, AND NUTS

Selected List of References on Proximate Composition*

- (1) Adolph, W. H.
1926. Analyses of Chinese food materials. Philippine Jour. Sci. vol. 30 pp. 287-93.
Data on a large number of foods including vegetables and vegetable products, fruits, and nuts. References to earlier sources.
- (2) Adriano, F. T.
1925. The proximate chemical analysis of Philippine foods and feeding stuffs. Philippine Agr. vol. 14, pp. 57-91.
A compilation of all data on chemical analyses of Philippine materials published by the various Government branches, previous to 1925. Data are given on approximately 100 fresh vegetables and 40 fresh fruits. Data on fruit juices, cheese, eggs, fresh and canned milk, and fish and fish products are also given.
- (3) _____
1929. The proximate chemical analysis of Philippine foods and feeding stuffs. II. Philippine Agr. vol. 18, pp. 119-25.
Analyses of 5 fruits and 7 roots and tubers. In addition, data are given for 5 smoked and salted fishes, 17 miscellaneous Philippine foods, and mares' milk, and cheese.
- (4) _____ and Tavanlar, E. J.
1925. The calcium oxide content of some Philippine foods. Philippine Agr. vol. 14, pp. 347-58.
Data on water and total ash in about 93 Philippine foods, including 40 fresh vegetables, 7 dried legumes, and 22 fresh fruits. Calcium oxide is also reported.
- (5) Agcaoili, F.
1916. Some vegetables grown in the Philippine Islands. Philippine Jour. Sci. Sect. A, vol. 11, pp. 91-100.
Analyses of 55 foods including fresh fruits, vegetables, and flowers.

*Such of these references as also contain data on calcium, phosphorus, or iron, are so designated in the annotations.

- (6) Atwater, W. O. and Bryant, A. P.
1899. The chemical composition of American food materials.
U.S. Dept. Agr. Off. Expt. Stas. Bul. 28, 87 p., illus.
(Revised ed. Reprinted 1906).
The majority of foods in these tables are of North American or European origin but analyses of a few tropical and sub-tropical nuts and fresh and dried fruits are included. Data are given for Brazil nuts, coconuts, and pistachio nuts, and for the following dried fruits: citron, dates, figs, and litchis. Revised data on the fresh fruits are given in U.S. Dept. Agr. Circ. 50, see reference (19).
- (7) Balland, A.
1922. Chemical composition and nutritive value of foods of France and her colonies. [trans. title] Ann. Sci. Agron. Franc. et Etrang. vol. 39. pp. [193]-248.
Foods studied are mostly of European origin but some tropical foods are included. Fresh and dried vegetables, vegetable products, fruits and fruit products, grains, flours, soups, condiments, and beverages were analyzed.
- (8) Barrott, O. W.
1925. The food plants of Porto Rico. Jour. Dept. Agr. Porto Rico vol. 9, pp. 61-208.
No data on composition, but classification and descriptions of many food plants of Porto Rico are given with scientific and local names.
- (9) Blasdale, W. C.
1899. A description of some Chinese vegetable food materials and their nutritive and economic value. U.S. Dept. Agr. Off. Expt. Stas. Bul. 68, 48 p., illus.
Analyses of some roots and tubers, green vegetables, and cucurbits, seeds and grains, fruits, nuts, and flowers, fungi, and algae.
- (10) Boersma, W. G.
1906. Composition of fruits of the Dutch Indies. [trans. title] Ztschr. Untersuch. Nahr. u. Genussmtl. vol. 11, pp. 533-4.
Data on the proximate composition of the flesh of many fruits common to the Dutch Indies. Each sample is designated by the scientific name as well as the native name. Data also given on physical composition.

- (11) Borntraeger, A.
1902. Sugars and acids in certain Southern fruits [trans. title], Ztschr. Untersuch. Nahr. u. Genussmtl. vol. 5, pp. 145-55.
Data on sugar and acids of the following tropical or oriental fruits; Oriental persimmon (*Diospyros lotus*); Japanese persimmon (*D. kaki*); banana (*Musa sapientum*); loquat (*Eriobotrya japonica*). Also data on the European medlar (*Mespilus germanica*); arbutus berry (*Arbutus unedo*); and the North American native persimmon (*Diospyros virginiana*).
- (12) Bosz, J. E. Q.
1911. The composition of foods of the Indies. [trans. title] Kolon. Mus. Haarl. Bul. 46, 261 p., illus.
Composition of miscellaneous foods of all kinds from various sources, particularly from the Dutch colonies in East and West Indies. Data assembled from a number of sources including the earlier bulletins of Koloniaal Museum of Haarlem.
- (13) Brahmachari, B.B. and Chatterjee, N.K.
1927. Food value of the nut of *Trapa bispinosa*. Indian Med. Gaz. vol. 62, pp. 365-70.
Data on proximate constituents and minerals, including calcium, phosphorus, and iron, of the peeled water chestnut, (*Trapa bispinosa*) also data on proximate composition of *Trapa* nut flour. The plant is botanically described and compared with water nut, (*Scirpus Kysore R.*)
- (14) Calvino, M.
1919. Cuba Estac. Expt. Agron. Informe 1917-18. 515 p., illus.,
Data, original and quoted, for a number of tropical foods including fruits and vegetables. Analyses are included for several legumes and starchy roots, for hibiscus seeds, oreja seeds (*Jatropha urens*), chaya leaves (*Enterolobium cyclocarpum*), cucurbits, mangos, and a number of citrus fruits.
- (15) _____
1920. Cuba Estac. Expt. Agron. Informe 1918-19, 1919-20. 786 p., illus.
Analyses, original and quoted, of 16 tropical vegetables, fresh and dried, including cassava, yams, sunflower tubers, arrowroot, cucurbits, and a number of legumes. Also, analyses of 13 fruits including avocados, mangos, carob bean, and a number of citrus fruits.
- (16) Cardenas, J. de and Moreno, E.
1923. Cuban fruits. [trans. title] Cuba Sec. Agr., Com. y Trab. Dir. Agr. Lab. Quim-Agricola, 63 p., illus.
Analyses of 27 fruits.

- (17) Chace, E. M., Tolman, L. M., and Munson, L. S.
1904. Chemical composition of some tropical fruits and their products. U. S. Dept. Agr. Bur. Chem. Bul. 87, 38 p.
Many analyses of Cuban fruits and fruit products including numerous samples of pineapple, fresh and canned.
- (18) Chatfield, C. and Adams, G.
1931. Proximate composition of fresh vegetables. U. S. Dept. Agr. Circ. 146, 24 p.
A compilation. Data are included on 15 vegetables of tropical origin.
- (19) _____ and McLaughlin, L. I.
1928. Proximate composition of fresh fruits. U.S. Dept. Agr. Circ. 50, 19 p.
Data on 16 fruits of tropical origin are included in a compilation.
- (20) Chung, H. L. and Ripperton, J. C.
1924. Edible canna in Hawaii. Hawaii Agr. Expt. Sta. Bul. 54, 16 p.
Data on proximate composition of tubers at different stages of maturity.
- (21) _____
1929. Utilization and composition of Oriental vegetables in Hawaii. Hawaii Agr. Expt. Sta. Bul. 60, 64 p.
Analyses of 56 fresh vegetables, mainly tropical or Oriental, with scientific names, descriptions, and photographs. Calcium, phosphorus, and iron also reported.
- (22) Church, C. G. and Chace, E. M.
1922. Some changes in the composition of California avocados during growth. U.S. Dept. Agr. Bul. 1073, 22 p., illus.
Analyses of numerous varieties, principally Guatemalan and hybrid races at different stages of maturity.
- (23) Condit, I. J. and Cruess, W. V.
1927. I. The Kadota fig. II. Kadota fig products. Calif. Agr. Expt. Sta. Bul. 436, 45 p. illus.
Data, mostly quoted, on composition of dried Kadota figs grown in Italy, and of fresh Kadota figs grown in California.
- (24) Cook, D. H. and Quinn, E. J.
1928. The vitamin B. content of white yautia, yellow yautia, and plantain. Amer. Jour. of Trop. Med. vol. 8, pp. 73-7.
Data on proximate composition of plantain (*Musa paradisiaca*), and of white and yellow yautia.

(25) Embrey, H. and Wang, T. C.

1921. Analyses of some Chinese foods. China Med. Jour. Vol. 35, pp. 247-57, illus. Also in Contributions from the Peking Union Medical College, vol. 1, 1921.

Analyses of 36 Chinese foods, including vegetables, particularly legumes, vegetable products, fruits, and seeds. Most of these foods are not tropical.

(26) Fattah, M. T. and Cruess, W. V.

1927. Factors affecting the composition of dates. Plant Physiol. vol. 2, pp. 349-55.

Data on composition of mature dates of several varieties from California and from Mesopotamia. Also analyses of a number of varieties at different stages of maturity, and of one variety showing changes during artificial ripening.

(27) Gibbs, H. D. and Agcaoili, F.

1912. Philippine citrus fruits: their commercial possibilities and a chemical study of a few of the most important varieties. Philippine Jour. Sci., sect. A., vol. 7, pp 403-15, illus.

Analyses of the 5 citrus fruits, naranjita, cajel (sour orange), lime, calamansi, and calamondin. Also analyses of citrus juices and products.

(28) Greshoff, M.

1903. The composition of Indian foods. [trans. title]
I. Chem. Ztg. vol. 27, pp. 499-501.

Tabulated data on composition of 200 miscellaneous foods including many fruits and vegetables. These data are quoted from Buls. 22-28 of Kol. Mus. Haarl. (1900-1906).

1906. II. Chem. Ztg. vol. 30, pp. 856-8.

About 138 analyses of miscellaneous foods including fruits and vegetables. Data are quoted from Bulletins 30-34 of Kol. Mus. Haarl. See also reference (12) Bosz 1911.

(29) Grey, E. C.

1928. Food of Japan. Pub. of the League of Nations III. Health III, 2. 161 p.

Proximate composition and mineral constituents of about 500 foods, mainly Oriental, including cereals and cereal products, vegetables and vegetable products, seaweeds, fruits, fresh and dry, nuts, and vegetable oils, numerous animal foods, condiments, and beverages. Calcium, phosphorus and iron are reported. Bibliography and indexes of Japanese, English, and Latin names included.

(30) Hawaii University.

1925. The composition of some Chinese foods. Hawaii Univ. Occasional Papers No. 3; [3] p. Contribution from the Household Science Department.
Compilation of analyses of 31 Chinese foods, mostly vegetables, vegetable products, fruits, and nuts. One analysis each of birds' nests and eggs included.

(31) Jaffa, M. E. and Albro, F. W.

1918. Studies on the composition and nutritive value of some sub-tropical fruits. Calif. Avocado Assoc. Ann. Rpt. 1917, pp. 85-91.
Data on composition of avocados of several races, and of sapote [*Casimiroa edulis*], feijoa, lemon guava, and strawberry guava.

(32) Johnson, M. O.

1918. Drying as a method of food preservation in Hawaii. Hawaii Agr. Expt. Sta., Ext. Bul. 7, Emergency Ser. 5, 31 p., illus.
Analyses of taro, cassava, and sweetpotato, fresh and air-dry (flour). Peel and root analyzed separately.

(33) Kelley, W. P.

1911. A study of the composition of Hawaiian pineapples. Jour. Indus. Engin. Chem. vol. 3, pp. 403-5. Also in Hawaii Agr. Expt. Sta. Rpt. 1910, pp. 45-50.
Data on composition of naturally and artificially ripened pineapples and of the unripe fruit at different stages of maturity.

(34) Langley, R. W.

1907. The composition of some edible seeds from China. Jour. Amer. Chem. Soc. vol. 29, pp. 1513-5.
Data on proximate composition of ginkgo nuts (*Ginkgo biloba*), Chinese lotus seeds (*Nymphaea tetragonia*), and Chinese sweet almonds (*Prunus amygdalus*). Also data on iron, manganese, calcium, magnesium, phosphorus, sodium, and potassium in the ash of these seeds.

(35) Merrill, L. H.

1908. Food of man studies. Maine Agr. Expt. Sta. Bul. 158, pp. [219] - 238.
Analyses of 27 tropical fruits and vegetables are included together with data on miscellaneous food products.

(36) Mowry, H. and Toy, L. R.

1931. Miscellaneous tropical and sub-tropical Florida fruits. Fla. Agr. Expt. Sta. Bul. 223, 88 p., illus.
There are no data on composition but good botanical descriptions of the plant and fruit are given for many tropical and sub-tropical fruits. The bulletin is well illustrated.

- (37) Oshima, K.
1905. A digest of Japanese investigations on the nutrition of men. U. S. Dept. Agr. Off. Expt. Stas. Bul. 159, 224 p.
Data on the composition of numerous Oriental foods - vegetables, fresh and dried, vegetable products, and algae, together with data on other foods, especially fish and cereals
- (38) Piper, C. V. and Morse, W. J.
1923. The soybean. New York. McGraw-Hill Book Co., Inc., 329 p., illus.
This work brings together in a single volume the accumulated information on the soybean. Data are given on the proximate composition of the soybean and its various products. Calcium and phosphorus are included in the quoted data on mineral constituents of the seed. A bibliography of over 1200 references is included.
- (39) Pope, W. T.
1923. The acid lime fruit in Hawaii. Hawaii Agr. Expt. Sta. Bul. 49., 20 p.
Total solids, sugar, acid, and protein in lime juice recorded for 5 varieties of limes growing in Hawaii.
- (40) _____
1924. The Guatemalan avocado in Hawaii. Hawaii Agr. Expt. Sta. Bul. 51, 24 p.
Data on proximate composition of 5 varieties of Guatemalan avocados grown in Hawaii. Data are also given for 5 varieties of California grown fruit.
- (41) _____
1929. The macadamia nut in Hawaii. Hawaii Agr. Expt. Sta. Bul. 59, 23 p.
Analyses of 7 samples of macadamia nuts grown at various places in Hawaii. Botanical description given, culture, composition, and uses discussed.
- (42) _____
1930. Papaya culture in Hawaii. Hawaii Agr. Expt. Sta. Bul. 61, 40 p.
Botanical and cultural aspects considered, and uses noted. Data given on composition of ripe and unripe papaya fruit, largely quoted from Hawaii Agr. Expt. Sta. Rpt. 1914.
- (43) Popenoe, W.
1920. Manual of tropical and sub-tropical fruits, excluding the banana, coconut, pineapple, citrus fruits, olive, and fig. New York, The Macmillan Company., 474 p., illus.
Chemical data on about 25 tropical and sub-tropical fruits quoted from various sources. Descriptions are included of many other tropical and sub-tropical fruits.

- (44) Pratt, D. S. and Rosario, J. I. del
1913. Philippine fruits: their composition and characteristics.
Philippine Jour. Sci. sect. A., vol. 8, pp. 59-80,
illus.
Analyses of 36 samples of tropical fruits.
- (45) Prinsen Geerligs, H. C.
1897. Sugar content of some tropical fruits. [trans. title].
Chem. Ztg. vol. 21, p. 719.
Data on physical composition and sugars of 25 fruits
of Java.
- (46) Rossem, C. van
1927. The composition of the most important vegetable foodstuffs
of the Dutch East Indies. [trans. title] Meded. Alg.
Proefsta. Landbouw (Buitenzorg) no. 24, 76 p.
Analyses of edible canna, coleus, cassava, yams,
soybeans, mung beans, cowpeas, sweetpotatoes, peanuts, and
5 grains. Calcium, phosphorus and iron reported.
- (47) Ryerson, K., Jaffa, M.E., and Goss, H.
1924. Avocado culture in California. Parts I and II. Calif.
Agr. Expt. Sta. Bul. 365, 70 p., illus.
Analyses in Part II, by Jaffa and Goss, pages 62-70,
of 110 samples representing 69 varieties. One complete
ash analysis reported as per cent of ash.
- (48) Sahasrabuddhe, D. L.
1925. The chemical composition of the food grains, vegetables,
and fruits of western India. Bombay Dept. Agr. Bul.
124, 38 p.
Data are given on the composition of 5 cereal grains,
8 oil seeds, and seeds of 7 legumes. Vegetables analyzed
include those eaten as greens such as amaranths, spinach,
Chenopodium, safflower, methi (*Trigonella foenum-graecum*),
bladder dock (*Rumex vesicarius*), and coriander; those with
edible fruits, such as eggplant, okra, and a number of
cucurbits; and other vegetables such as cabbage, cauli-
flower, kohlrabi, and numerous roots and tubers including
yams and elephant's foot (*Amorphophallus campanulatus*).
Fruits analyzed include bananas, pomegranates, grapes,
figs, fresh and dried, guavas, citrus fruits, mangos,
custard-apple, jambul (*Eugenia jambolana*), dates, and
jackfruit. No data on minerals except one analysis of
mangos for calcium, phosphorus, potassium, and magnesium.
- (49) Santos, F. O. and Santos, S.
1926. The vitamin B content of some Philippine fruits and
vegetables. Philippine Jour. Sci. vol. 30, pp. 307-23.
Proximate analyses of 3 vegetables - paco (*Diplazium*
esculentum), balunsay (*Celosia argentea*), and uray babae
or kalunay (*Amaranthus viridis*.)

- (50) Sherman, H. E. and Wang, T. C.
1929. Chemical analyses of thirty-seven Oriental foods.
Philippine Jour. Sci. vol. 38, pp. 69-80.
Figures on proximate composition of a number of Oriental foods, including one fruit, 4 seeds, about 23 vegetables, and several other miscellaneous foods.
- (51) Shorey, E. C.
1906. The composition of some Hawaiian feeding stuffs. Hawaii Agr. Expt. Sta. Bul. 13, 23 p.
Includes data on cassava root and some seed and grain products, particularly sorghum and millet. Potassium, calcium, and phosphorus reported.
- (52) Sievers, A.F. and Barger, W. R.
1930. Experiments on the processing and storing of Deglet Noor dates in California. U.S. Dept. Agr. Tech. Bul. 193, 24 p. illus.
Discussion of characteristics of Deglet Noor dates together with data on moisture and sugars in fresh and processed samples and in stored dates processed and unprocessed.
- (53) Sornay, P. de.
1913. Les plantes tropicales de la famille des Legumineuses. Paris. Augustin Challamel, 489 p., illus.
The author discusses the history, botanical characteristics, cultivation, and uses of many tropical leguminosae, including both forage and food plants. Analyses, mostly quoted, are given for proximate composition and mineral constituents, including calcium and phosphorus, for various parts of the plants; data are included on the dried seeds of about 21 edible species, and on edible pods or parts of 11 species.
- (54) Thomas, C.C. and Church, C.G.
1924. The Chinese jujube. U.S. Dept. Agr. Bul. 1215, 31 p., illus.
Composition of 14 samples, including 6 varieties. Fresh, mature, immature, and dried fruit represented.
- (55) Thompson, A. R.
1915. The composition of Hawaiian fruits and nuts. Hawaii Agr. Expt. Sta. Rpt. (1914), pp. 62-73.
Analyses of 86 samples of Hawaiian fruits and nuts.
- (56) Tilt, J. and Hubbell, R. B.
1930. A study of the Japanese persimmon grown in Florida. Jour. Home Econ. vol. 22, pp. 757-65.
Brief descriptions of the fruits of seven varieties together with data on their proximate composition. Data on the mineral constituents, including calcium, phosphorus, and iron, are reported for Okami and Tane Nashi varieties.

- (57) Tilt, J. and Winfield, M.
1928. Chemical composition of West Indian seedling avocados. Jour. Home Econ. vol. 20, pp. 43-6.
Original analyses of West Indian race avocados compared with quoted data on other races. Calcium, phosphorus, iron, and magnesium are reported.
- (58) Valenzuela, A. and Wester, P. J.
1930. Composition of some Philippine fruits, vegetables, and forage plants. Philippine Jour. Sci. vol. 41, pp. 85-102, illus.
Analyses given for 7 varieties of bananas, 13 fruits, 2 nuts, 9 vegetables, and 12 forage crops.
- (59) Vinson, A.E. and Freeman, G.F.
1911. Chemistry and ripening of the date. Ripening dates by incubation. Ariz. Agr. Expt. Sta. Bul. 66, illus.
Data on percentage of seeds and on percentage of moisture and sugars in numerous varieties of dates. Also data on 2 typical varieties during growth, ripening, and storage. Still other figures on composition of artificially ripened dates.
- (60) Wells, A. H., Agcaoili, F., and Orosa, N. Y.
1925. Philippine citrus fruits. Philippine Jour. Sci. vol. 28, pp. 453-527, illus.
Data on chemical composition of juice of 41 varieties of citrus fruit, including 5 native varieties, and 33 others introduced from many places.
- (61) _____, Taguibao, H., and Valenzuela, A.
1928. Composition of Philippine pineapples. Philippine Jour. Sci. vol. 36, pp. 157-85, illus.
Smooth Cayenne pineapples from Hawaiian stock, and native pineapples are described and their differences in composition shown. Extensive data are reported on the proximate composition of the edible portion, and on sugars and acid in the juice.
- (62) Wester, P. J.
1924. The food plants of the Philippines. Philippine Bur. Agr. Bul. 39, 236 p., illus. (3rd revised edition).
Classification and description of many Philippine food plants giving scientific and local names, pages 212-21. Analyses of many Philippine foods including fruits and vegetables, both fresh and dried, and grains. Most of these are compiled from various sources.

(63) Wu, Hsien.

1928. Nutritive value of Chinese foods. Chinese Jour. Physiol.
Rpt. Ser. 1, pp. 153-86.

Original and compiled analyses of 221 samples of vegetables, fresh, dried, pickled, and salted, and vegetable products, and 81 of fresh and dried fruits; also analyses of grains, nuts, condiments, seeds, and animal foods, mostly fish. Calcium, phosphorus, iron, and vitamins are also reported for some of these foods.

(64) Young, R. A.

1924. The dasheen: a southern root crop for home use and market. U.S. Dept. Agr. Farmers' Bul. 1396, 35 p., illus.
An average of 10 analyses of dasheen corms and tubers.

